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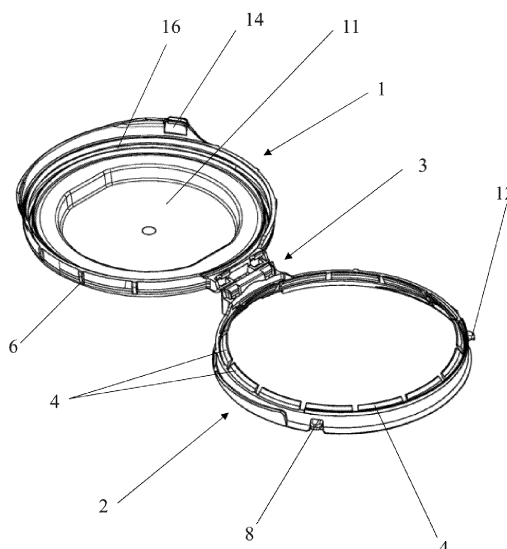
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(54) **PROTECTOR FOR CONTAINERS**

(57) The invention relates to a protector for containers that include a rivet that protrudes in the upper portion of the container, comprising an upper lid and a lower ring that can be coupled to the side wall of the container, the upper lid and the lower ring being attached to each other. The lower ring includes a plurality of locking tabs, which protrude from an interior face of the lower ring in an upwards direction and along the entire perimeter of the low-

er ring, said locking tabs having an angle of inclination with respect to a vertical portion of the lower ring, said locking tabs being designed to hold the side wall of the container and abut under the rivet present in the container, the upper lid including at least a negative portion that protrudes from an interior face of a perimeter flange, which is attached to the locking tabs in a closed state of the upper lid with respect to the lower ring.

FIG. 1



Description

OBJECT OF THE INVENTION

[0001] The object of the present application is to register a protector for containers.

[0002] More specifically, the invention proposes the development of a protector for containers, intended to be coupled to cylindrical containers that include a rivet that protrudes in the upper portion of the very container, comprising an upper lid to cover the upper face of the container and a lower ring that can be coupled to the side wall of the container, such that the lower ring is able to rotate with respect to the container.

BACKGROUND OF THE INVENTION

[0003] The arrangement of protectors for containers for hygienic purposes, which are essentially comprised of an upper lid that is articulated by means of a hinged region to a lower ring that can be coupled to the container, is well known in the state of the art, these protectors being especially suitable for can-type containers. Examples of this type of protectors are described in Spanish patents held by the same applicant no. ES 1071303, ES 1072031.

[0004] Although the protectors described in the previous patents satisfactorily fulfil the hygienic purpose, the market has increasingly new needs, among which include the possibility of being able to place the protectors in alignment with respect to a mark or point of the container in order to improve the presence of the display of the containers when they are shown, for example, for retail sale, where the visual appearance of the assembly of the containers (the display of the product brand or logo, promotions) is a point of great interest for distribution companies.

[0005] Therefore, it is necessary that the protector for containers be able to be simply and easily redirected to the consumer, without implying constructive complexity of the protector.

[0006] In addition, the applicant is currently unaware of the existence of an invention having all the characteristics described herein.

DESCRIPTION OF THE INVENTION

[0007] The present invention has been developed with the aim of providing a protector for containers that constitutes a novelty within the field of application, and solves the disadvantages mentioned above while also contributing other additional advantages, which will become evident from the description provided below.

[0008] Therefore, an object of the present invention is to provide a protector for containers, intended to be coupled to cylindrical containers that include a rivet that protrudes in the upper portion of the very container, comprising an upper lid to cover the upper face of the container and a lower ring that can be coupled to the side

wall of the container, the upper lid and the lower ring being attached to each other in a hinged way.

[0009] In particular, the invention is characterised by the fact that the lower ring includes in a point close to the upper flange thereof a plurality of locking tabs that are separated from each other, which protrude from an interior face of the lower ring in an upwards direction and along the entire perimeter of the lower ring, said locking tabs having an angle of inclination with respect to a vertical portion of the lower ring, said locking tabs being designed to hold the side wall of the container and abut under the rivet present in the upper part of the container, and wherein the upper lid includes at least a negative portion that protrudes from an interior face of a perimeter flange, which is fastened to the locking tabs in a closed state of the upper lid with respect to the lower ring.

[0010] In one embodiment, at least said negative portion that protrudes from the interior face of a perimeter flange is facing and in contact with the locking tabs in a closed state of the upper lid with respect to the lower ring.

[0011] In an alternative embodiment, it comprises a plurality of negative portions that protrude from the interior face of a perimeter flange, which are facing and in contact with the locking tabs in a closed state of the upper lid with respect to the lower ring.

[0012] In an alternative embodiment, the protector for containers comprises a plurality of negative portions that protrude from the interior face of a perimeter flange, which occupy the free space between the locking tabs in a closed state of the upper lid with respect to the lower ring.

[0013] There is also the possibility that the invention has a configuration of negative portions that is a combination of the embodiments described previously.

[0014] Said lower ring further includes a chamfered lower extension that facilitates the insertion of the lower ring in the container since it enables possible variations of centring between the protector and the container at the time of assembly to be absorbed.

[0015] Thanks to these characteristics, in addition to the hygienic advantages that it entails for a user, the outlet area of the container through which a beverage to be consumed, for example, exits facilitates the rotation of the assembly of the protector with respect to the container, which enables the "front position" of the protector to be aligned with respect to a specific point of the rest of the container. Furthermore, this structural configuration prevents the protector from being extracted from the container in an undesired way. Furthermore, the presence of the locking tabs reduces the deformation that the rest of the lower ring may undergo during the assembly of the protector in a corresponding container.

[0016] According to another aspect of the invention, each locking tab has in a lower region a depression with a material thickness, which enables a degree of flexibility thereof, which facilitates the placement of the protector in the container during an assembly operation, thereby optimising an assembly process, as well as facilitating

the action of rotating the protector with respect to the container on which it is assembled.

[0017] Preferably, the lower ring has a plurality of partitions that protrude from the exterior face thereof, thereby providing a better holding surface of the protector for the user in order to facilitate the rotation thereof if required.

[0018] Also preferably, a side wall of the upper lid has a plurality of partitions.

[0019] Advantageously, the partitions present in the upper lid are complementary in shape and size with respect to the partitions present in the lower ring.

[0020] Other characteristics and advantages of the protector for containers, object of the present invention, will become clear in light of the description of a preferred, though non-exclusive, embodiment, which, by way of a non-limiting example, is illustrated in the accompanying drawings, wherein:

BRIEF DESCRIPTION OF THE DRAWINGS

[0021]

Figure 1 shows a perspective view of a first embodiment of a protector for containers according to the present invention in an open position;

Figure 2 shows a perspective view of the protector for containers shown in Figure 1 in a closed position placed in a container;

Figure 3 shows a detailed elevation view of a section of the protector for containers in a functional state, assembled in a container;

Figure 4 shows a perspective view of a second embodiment of the protector for containers of the present invention;

Figure 5 shows a perspective view of a third embodiment of the protector for containers of the present invention; and

Figure 6 shows a schematic view of an assembly sequence of the protector of the invention in a conventional container.

DESCRIPTION OF A PREFERRED EMBODIMENT

[0022] In view of the aforementioned figures and, in accordance with the numbering adopted, an example of a preferred embodiment of the invention can be observed therein, which comprises the parts and elements indicated and described in detail below.

[0023] As can be seen in the two embodiments shown in Figures 1 and 4, the protector for containers, intended to be coupled in cylindrical containers that include a rivet that protrudes in the upper part of the very container, comprising an upper lid (1) to cover the upper face of the container and a lower ring (2) that can be coupled to the side wall of the container (E), the upper lid (1) and the lower ring (2) being fastened together in a hinged way by a hinged section (3), both being made from a plastic

material that can be moulded by injection.

[0024] It should be mentioned that this protector has a dual function as a watertight seal and a sealing shutter thanks to the structural configuration of the protector shown in Figures 1 and 4.

[0025] The upper lid includes at least one negative portion (16) (first embodiment shown in Figure 1) that protrudes from an interior face of a perimeter flange (17), which is facing and in contact with a region of the locking tabs (4) and the rivet (10) of the container in a closed state of the upper lid (1) with respect to the lower ring (2).

[0026] The embodiment shown in Figure 4 differs from that shown in Figure 1 in the arrangement of a plurality of negative portions (16) separated from each other and located along the length of the perimeter flange (17).

[0027] To enable the rotation of the protector with respect to the container, the lower ring (2) includes in a point close to the upper flange thereof a plurality of locking tabs (4) that are separated from each other, which protrude from an interior face of the lower ring (2) in an upwards direction and along the entire perimeter of the lower ring (2), said locking tabs having an angle of inclination with respect to a vertical portion (5) of the lower ring, said locking tabs (4) being designed to hold the side wall of the container (E) and abut under the rivet (10) present in the upper part of the container (E).

[0028] Advantageously, each locking tab (4) has in a lower region a depression (40) with a material thickness, as can be seen in more detail in Figure 3.

[0029] To facilitate the hold for rotating the upper lid (1) and positioning it in a specific way, the lower ring (2) and the side wall of the upper lid (1) have a plurality of partitions (6, 7) that protrude from the respective exterior faces thereof.

[0030] It should be mentioned that the partitions (6) present in the upper lid (1) are complementary in shape and size with respect to the partitions (7) present in the lower ring (2).

[0031] Furthermore, the protector includes a guarantee seal that is made up of a pair of protrusions (8) that protrude outwardly from the lower ring and are inserted in corresponding windows (14) in a state prior to a first use of the container. In the case that a user separates the upper lid (1) from the lower ring (2), said protrusions (8) will break a fragile region (9). Thus, it enables the user to know whether the container has been previously handled.

[0032] The upper lid (1) preferably includes a housing (11) that is made up of a centred protruding portion, which defines a space for housing additional objects, such as an envelope or pouch that contains some food ingredient or cutlery or similar. As can be seen, the upper part of the housing has a flat surface (12), which facilitates the display of publications on said surface which can be easily read by the user.

[0033] To help the user to open the upper lid (1), a tongue (13) is provided which is located in the front part of the upper lid (1), as shown in Figures 2 and 3.

[0034] The lower ring further includes a chamfered lower extension (15) intended to facilitate the insertion of the lower ring in the container.

[0035] Figure 5 shows an alternative embodiment of the invention that differs from that shown in Figure 4 in that the upper lid includes a negative portion that overlaps with the locking tabs (4) present in the lower ring (2), small projections (18) that occupy the space existing between the locking tabs of the lower ring (2) protruding from the negative section of the upper lid (1).

[0036] Figure 6 shows the process of placing the protector in a can-type container, which is carried out by exerting pressure on the upper lid, the upper lid being that which pushes the lower ring until it reaches the joint clipping position under the rivet present in the container. The previously mentioned locking tabs of the lower ring have a section with a depression with a thickness, thereby producing a specific bending/rotation point that makes it possible that, during the assembly process in which the locking tabs collide against the rivet of the container, said locking tabs (4) open vertically and enable the lower ring to enter until the locking tabs are housed under the rivet of the container.

[0037] As shown with greater clarity in Figure 3, in a functional state, there is a free space between the upper part of the rivet (10) of the container and the lower area of the upper lid (1), which facilitates the action of rotating the protector with respect to the container. Furthermore, this aspect makes it easier for the locking tabs (4) to be placed properly under the rivet (10).

[0038] The details, shapes, dimensions and other accessory elements used to manufacture the protector for containers of the invention may be suitably substituted for others which do not diverge from the scope defined by the claims included below.

Claims

1. A protector for containers, intended to be coupled in cylindrical containers that include a rivet that protrudes in the upper part of the very container, comprising an upper lid to cover the upper face of the container and a lower ring that can be coupled to the side wall of the container, the upper lid and the lower ring being fastened together in a hinged way, **characterised by** the fact that the lower ring includes in a point close to the upper flange thereof a plurality of locking tabs that are separated from each other, which protrude from an interior face of the lower ring in an upwards direction and along the entire perimeter of the lower ring, said locking tabs having an angle of inclination with respect to a vertical portion of the lower ring, said locking tabs being designed to hold the side wall of the container and abut under the rivet present in the upper part of the container, and wherein the upper lid includes at least a negative portion that protrudes from an interior face of a pe-

rimeter flange, which is fastened to the locking tabs in a closed state of the upper lid with respect to the lower ring.

2. The protector for containers according to claim 1, **characterised by** the fact that at least said negative portion that protrudes from the interior face of a perimeter flange is facing and in contact with the locking tabs in a closed state of the upper lid with respect to the lower ring.
3. The protector for containers according to claim 1, **characterised by** the fact that it comprises a plurality of negative portions that protrude from the interior face of a perimeter flange, which are facing and in contact with the locking tabs in a closed state of the upper lid with respect to the lower ring.
4. The protector for containers according to claim 1, **characterised by** the fact that it comprises a plurality of negative portions that protrude from the interior face of a perimeter flange, which occupy the free space between the locking tabs in a closed state of the upper lid with respect to the lower ring.
5. The protector for containers according to claim 1, **characterised by** the fact that each locking tab has in a lower region a depression with a material thickness.
6. The protector for containers according to claim 1, **characterised by** the fact that the lower ring has a plurality of partitions that protrude from the exterior face thereof.
7. The protector for containers according to any of the preceding claims, **characterised by** the fact that a side wall of the upper lid has a plurality of partitions.
8. The protector for containers according to claims 5 and 6, **characterised by** the fact that the partitions present in the upper lid are complementary in shape and size with respect to the partitions present in the lower ring.
9. The protector for containers according to any of the preceding claims, **characterised by** the fact that the lower ring includes a chamfered lower extension intended to be in contact with the container.

FIG. 1

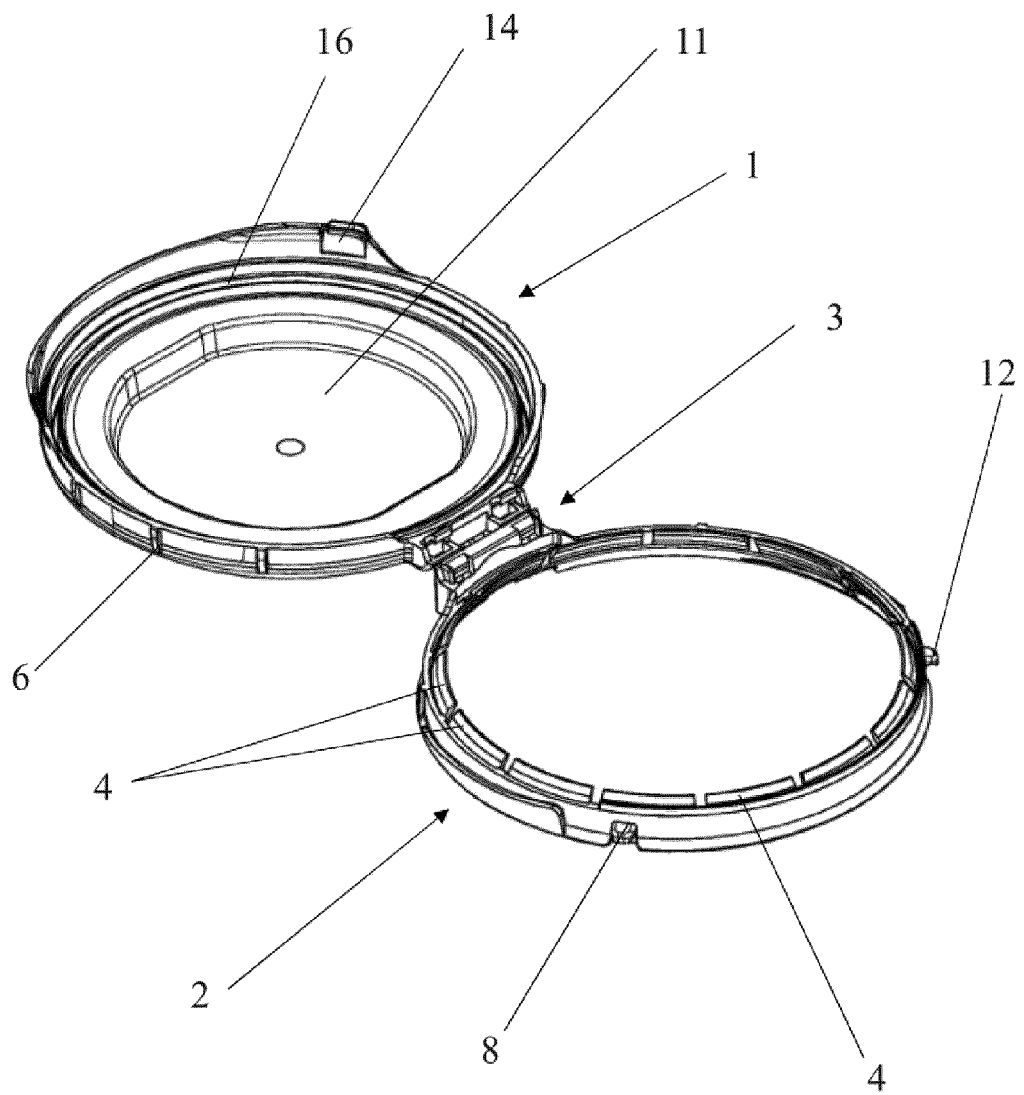


FIG. 2

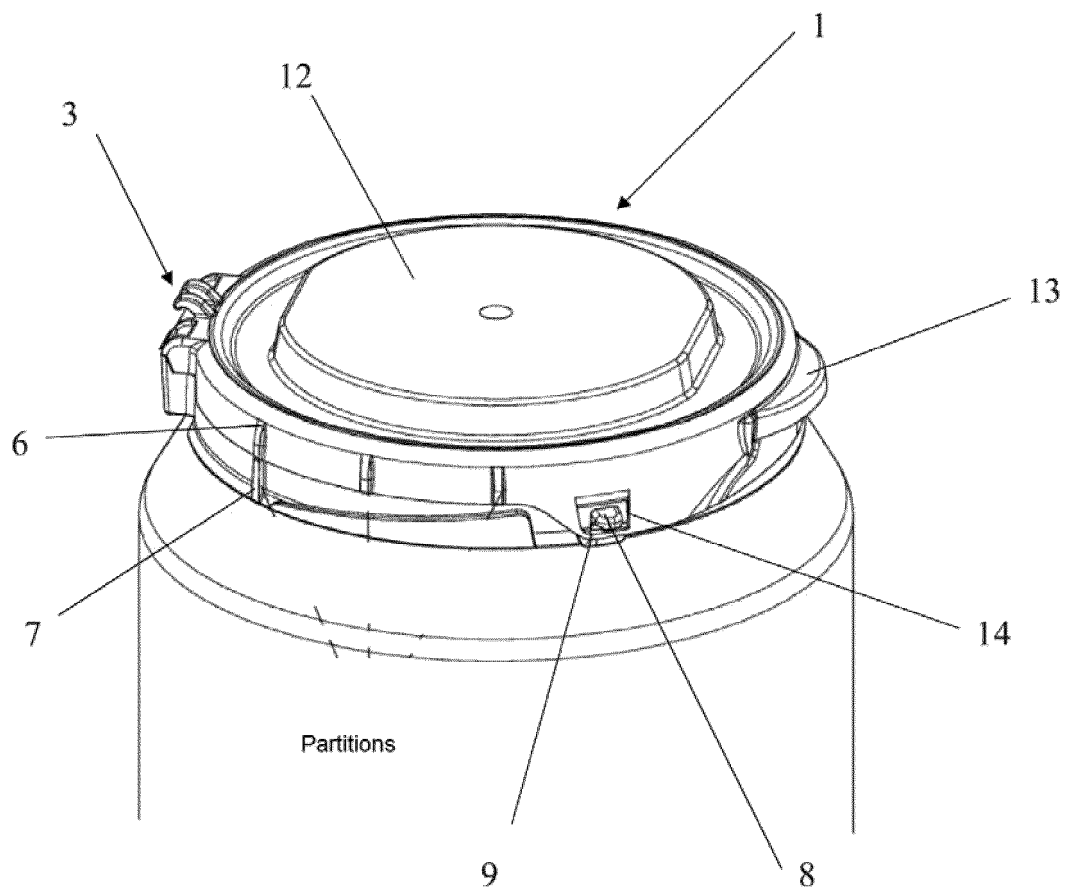


FIG. 3

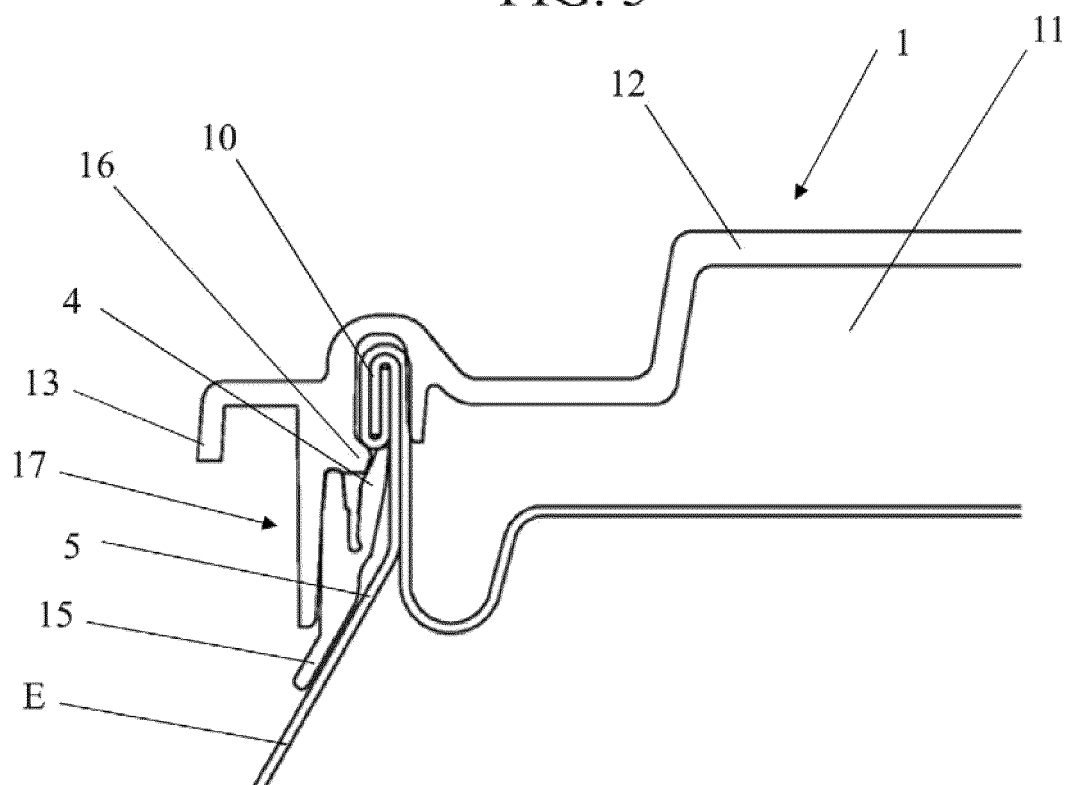


FIG. 4

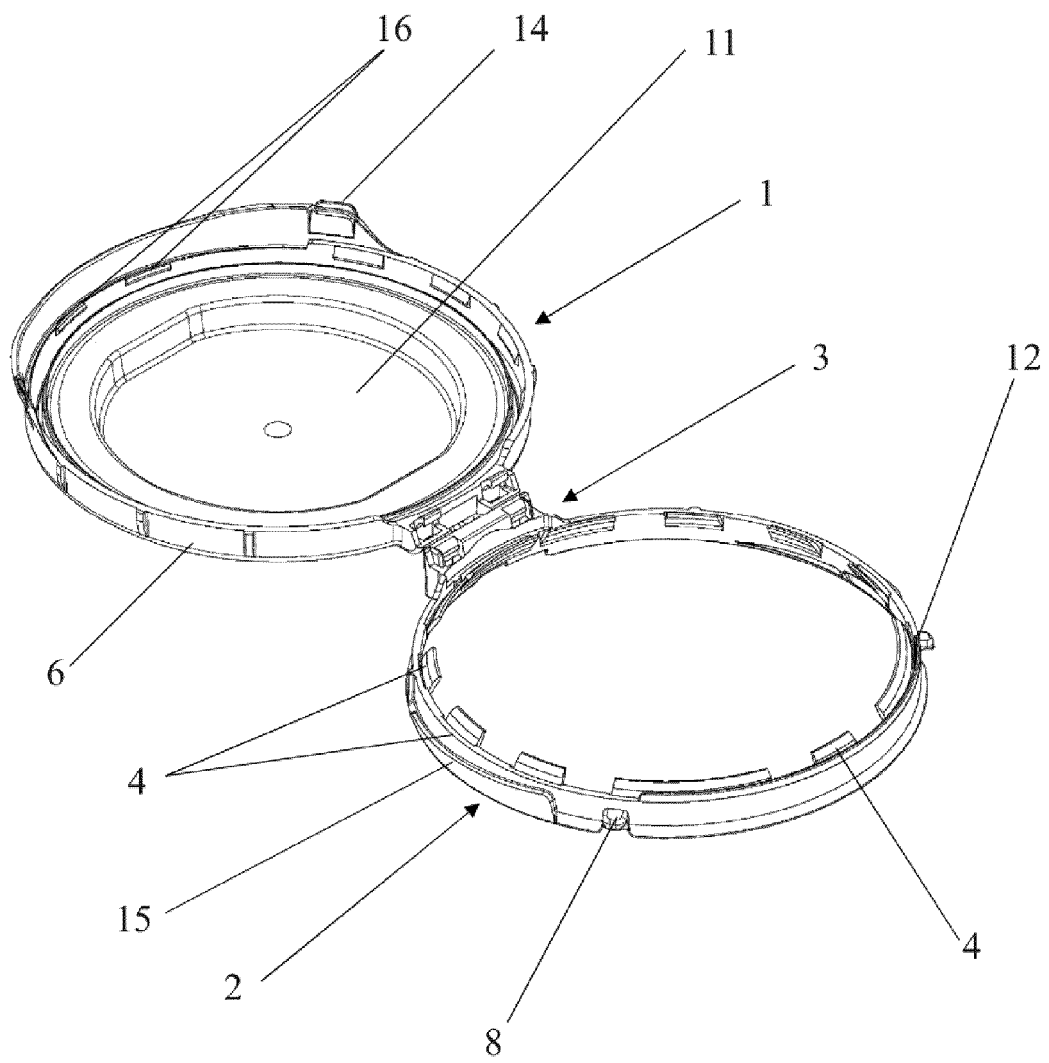


FIG. 5

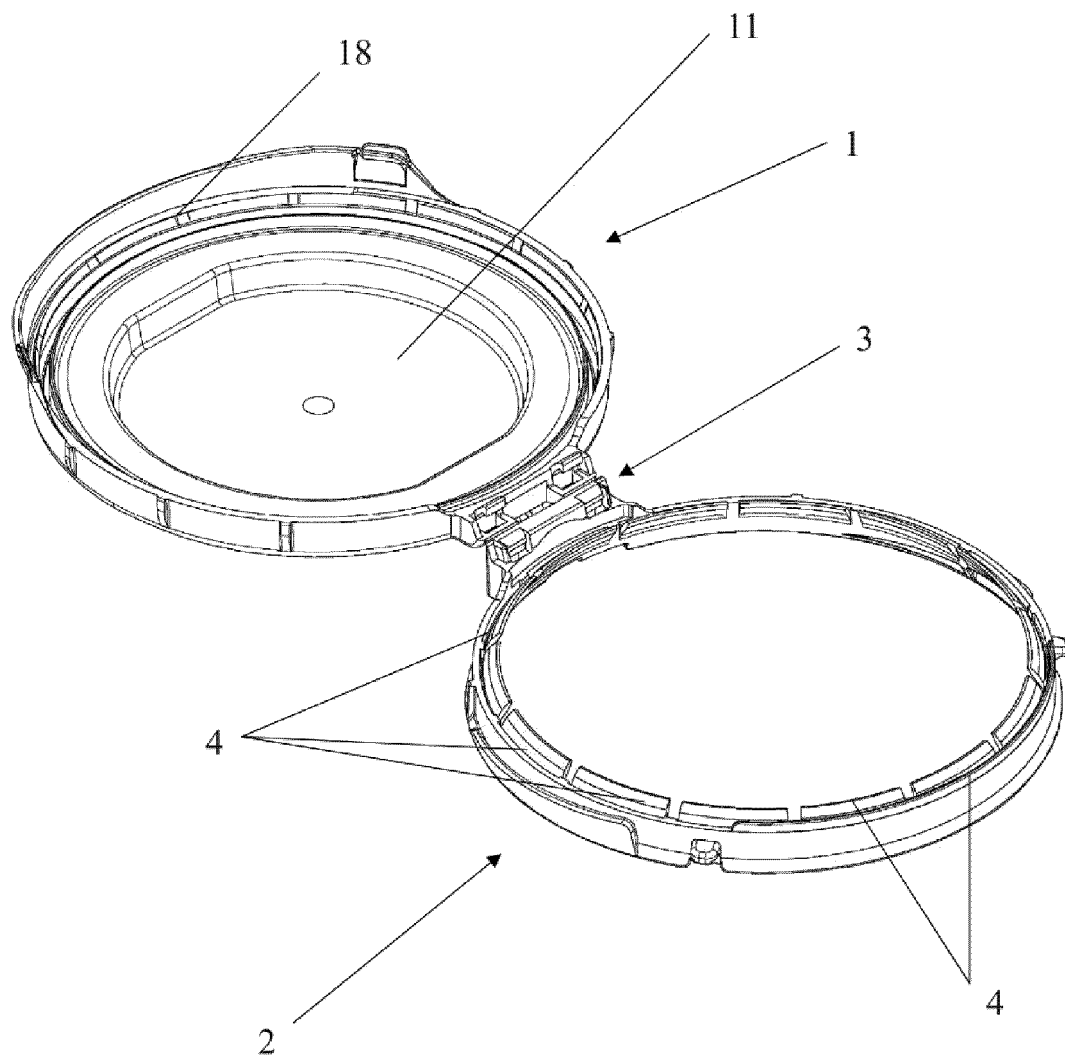
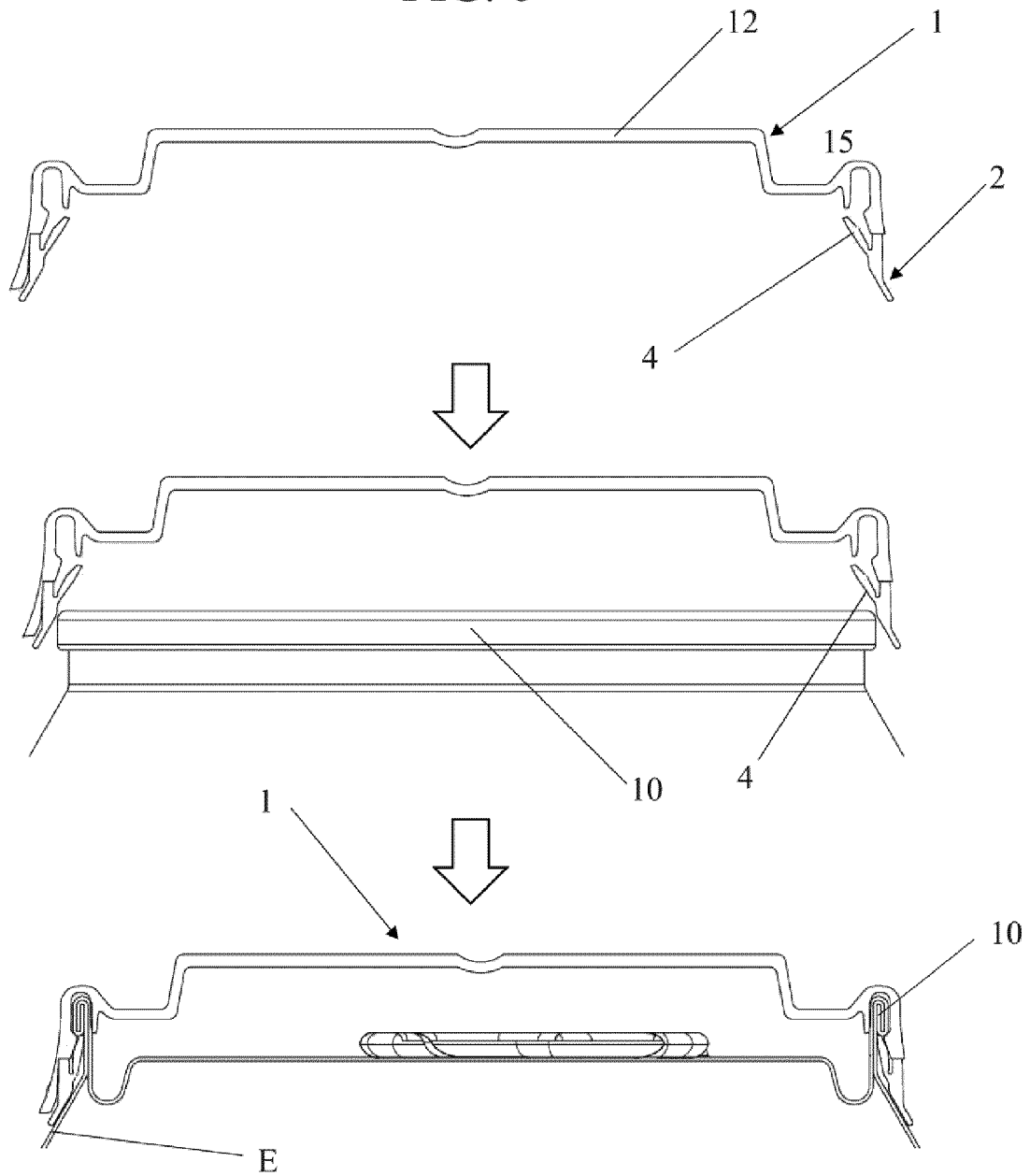


FIG. 6



INFORME DE BÚSQUEDA INTERNACIONAL

Solicitud internacional N°

PCT/ES2018/070800

A. CLASIFICACIÓN DEL OBJETO DE LA SOLICITUD
INV. B65D51/00
ADD.

De acuerdo con la Clasificación Internacional de Patentes (CIP) o según la clasificación nacional y CIP.

B. SECTORES COMPRENDIDOS POR LA BÚSQUEDA

Documentación mínima buscada (sistema de clasificación seguido de los símbolos de clasificación)
B65D

Otra documentación consultada, además de la documentación mínima, en la medida en que tales documentos formen parte de los sectores comprendidos por la búsqueda

Bases de datos electrónicas consultadas durante la búsqueda internacional (nombre de la base de datos y, si es posible, términos de búsqueda utilizados) EPO-Internal, WPI Data

C. DOCUMENTOS CONSIDERADOS RELEVANTES

Categoría*	Documentos citados, con indicación, si procede, de las partes relevantes	Relevante para las reivindicaciones N°
A	US 2016/137365 A1 (GONZALEZ SANCHEZ JOSE FRANCISCO [ES]) 19 de mayo de 2016 (19.05.2016) párrafos [0008], [0010], [0031] - [0033]; figuras 1,4,6 -----	1-9
A	WO 2009/132318 A1 (SEANET DEV INC [US]; PIERCE DAVID [US]; URQUHART EDWARD [US]) 29 de octubre de 2009 (29.10.2009) párrafos [0070]; figuras 16a,16b -----	1-9

☐ En la continuación del Recuadro C se relacionan otros documentos ☒ Los documentos de familias de patentes se indican en el Anexo

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Formulario PCT/ISA/210 (segunda hoja) (Enero 2015)

INFORME DE BÚSQUEDA INTERNACIONAL

Información relativa a miembros de familias de patentes

Solicitud internacional N°

PCT/ES2018/070800

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			US	2009283526	A1	19-11-2009
			WO	2009132318	A1	29-10-2009

REFERENCES CITED IN THE DESCRIPTION

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- ES 1072031 [0003]